

SYNCHRONOUS SYSTEM FOR VIRTUAL REALITY FRAME AND REAL OBJECTS

FIELD OF THE INVENTION

The present invention relates to virtual realities, and particularly
5 to a synchronous system for a virtual reality frame and real objects.

BACKGROUND OF THE INVENTION

In the prior art virtual reality designs, only one scenery is
provided which is used as a background. In front of the virtual
reality frame is arranged with a machine, for example, an exercising
10 machine so that when the user uses the machine, the virtual reality
frame is used as a background to increase the interest as the user uses
the machine. However the prior art design is dull because the
background is not vivid and is unchangeable.

SUMMARY OF THE INVENTION

15 Accordingly, the primary object of the present invention is to
provide a synchronous system for a virtual reality frame and real
objects, which can provide very plentiful background, the background
is changeable and is controllable by the users.

Another object of the present invention is to provide a
20 synchronous system for a virtual reality frame and real objects,
wherein the virtual reality frame is changeable according to the object

to be simulated.

A further object of the present invention is to provide a synchronous system for a virtual reality frame and real objects, wherein the icons in the virtual reality frame represent some real
5 objects, and the actions of the icons in the virtual reality frame are learnable so that the user can control the real objects by the simulation in the virtual reality frame.

To achieve above object, the present invention provides a synchronous system for a virtual reality frame and real objects,
10 wherein a virtual reality system is installed to a mainframe with display frame. Objects in a room are installed with sensors and transmitters. Signals of these sensors are transmitted to a transceiver of the mainframe so that the mainframe knows the conditions of the object in the room. A plurality of toys are in a
15 room. Actions of the toys are stored in the mainframe. The display of the mainframe has icons which represents the toys. The objects have corresponding icons in the virtual reality frame. The signals of the sensors are transmitted to the mainframe through the transmitter so that the virtual reality frame can show the result. The
20 transceiver transmits the signals to the receiver so that the objects can act according to the received signals.

The various objects and advantages of the present invention will be more readily understood from the following detailed description when read in conjunction with the appended drawing.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 shows the structure of the synchronous system for a virtual reality frame and real objects of the present invention.

Fig. 2 shows the flow diagram of the present invention.

5 Fig. 3 shows one example of the present invention.

Fig. 4 shows the arrangements in one embodiment of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

10 Referring to Figs. 1 to 4, a synchronous system for a virtual reality frame and real objects is provided.

A virtual reality system is installed to a mainframe with display frame, such as a computer, a PDA, a game machine, etc.

The objects are installed with sensors and transmitters, for
15 example, in a room 12, a door 13 is installed with a temperature sensor 21 and the transmitter 22, a window 3 is installed with a vibration sensor 31 and a transmitter 32, a kitchen 4 is installed with a smoke sensor 41 and a transmitter 33, and a bath room 5 is installed with a moisture sensor 51 and a transmitter 34, etc. Signals of these
20 sensors are transmitted to a transceiver 10 of the mainframe 1 so that the mainframe can know the conditions of the object in the room.

Moreover, there are a plurality of toys in the room. Thus, the present invention is used to control toy models. For example, the toy bear 6 is installed with a wireless receiver 61, a toy web 7 is installed with a wireless receiver 71, a toy dog 8 is installed with a wireless receiver 81, and a toy car 9 is installed with a wireless receiver 91.

The actions of the toys can be stored in the mainframe 1. The display of the mainframe 1 has icons which represent the toys. Such as the moving path 101 of the bear 6 can be stored in the mainframe 1.

Above said objects have corresponding icons in the virtual reality frame. The signal of the sensors 21, 31, 41, 51 are transmitted to the mainframe 1 through the transmitter 22, 32, 42, and 51 so that the virtual reality frame can show the result.

The transceiver 10 transmits the signals to the receiver 61, 71, 81, and 91 so that the objects can act according to the received signals.

The step for executing the present invention will be described herein.

In step 200, a virtual reality program is inputted to the mainframe.

In step 201, the environmental objects, such as door, are selected. In the present invention, there are many icons which presents objects and toys being stored in the virtual reality program. The

environmental objects are such as kitchen, bathing room, or outer doors objects, such as mountains, stars, moon, whether conditions, light, etc.

In step 202, the toys are selected. The users can select the kinds,
5 colors, actions, etc., of the toys.

In step 203, the toys are wirelessly controlled. The icons of the toys in the virtual reality frame can be operated manually and then the toys will act as the action of the toy in the virtual reality frame.

In step 204, the complex actions of the toys are learnt and the real
10 toys can execute the complex action according to the learning result. In the present invention, a series of actions of the toys are learnt and are stored in the mainframe 1. Then the real toys can execute the complex actions according to the learning result.

Advantages of the present invention will be described hereinafter.
15 The virtual reality icons act with the real objects or toys synchronously. The objects in the room are selected as desired. The learning mode can be used to simplify the control process. The icons in the virtual reality frame can interact with the real objects and toys.